

ABSTRACT OF THE DISCLOSURE

A silent chain power transmitting apparatus has an endless link chain having a plurality of link plates (11A,11B,11C,...) connected together, and sprocket wheels (20). Each of an inside flank (13) and an outside flank (14) of each link plate (11A,11B,11C,...) is profiled by a circular shape of a same radius (ρ) of curvature whose individual center ($d1,...$) of curvature is on a chain pitch line (PL). Each tooth (22) of the sprocket wheel (20) is profiled by a circular shape of the same radius(ρ) of curvature, which is meshed with corresponding inside flank (13) and outside flank (14) of each link plate (11A,11B,11C,...). A power of the sprocket wheel (20) is transmitted to the link plates (11A,11B,11C,...) in linear contact (or surface contact) momentarily, not in point contact.